

Application No.: 10/812,349

Docket No.: SOCKET 3.0-003

IN THE DRAWINGS

Please delete sheet 8 and insert in its place the attached Replacement Sheet containing amended FIGS. 13A through 13I.

REMARKS

Claims 52 through 59 remain pending in the application with the present amendments. The drawings are amended herein to address the objections thereto by the Examiner in that FIGS. 13A through 13I are amended to include the labels "PRIOR ART" as indicated on the attached Replacement Sheet.

In the Office Action, claims 52 through 59 were rejected under 35 U.S.C. §102 as being anticipated by U.S. Patent No. 6,329,610 to Takubo et al. ("*Takubo*"), or, alternatively as being anticipated by U.S. Patent No. 6,050,832 to Lee et al. ("*Lee*") or were rejected under 35 U.S.C. §103(a) as being obvious over *Takubo* in view of Admitted Prior Art. For the reasons set forth below, applicants respectfully submit that the presently presented claims overcome the rejections.

A feature of the invention recited in the presently pending claims is that solder balls are disposed on bumps which extend through an insulating film. Tops of the bumps are surrounded in lateral directions by the insulating film. Stated another way, the solder balls are disposed on the tops of the bumps, and the tops are otherwise unconnected to other conductive features.

By contrast, prior art structures required that a solder ball base film 12b be patterned to overlies portions of the insulating film (See FIG. 13G of applicants' drawings and accompanying description at pages 3 and 4 of applicants' specification). Such solder ball base film is eliminated in the invention recited in claims 52 and 56.

Takubo and *Lee* describe devices which are similar to those described as prior art in applicants' specification. The device described in *Takubo* requires "via lands 13a" (FIG. 1; col. 15, lns. 47-50; col. 16, lns. 27-37) to surround conductively filled via holes. The interposer described in *Lee* (FIG. 1; col. 4, lns. 52-55) requires top contact layers 30 to

overlie an insulating layer, the top contact layer connected to vertically oriented via connections 28. Clearly, neither *Takubo* nor *Lee* meets the recitations of the invention recited in claim 52.

Support for the present amendments is provided, *inter alia*, in FIG. 1 and the accompanying description thereof at page 31, ln. 15 through page 33, ln. 7 of the specification.

In view of the above, it is respectfully requested that these amendments now be entered, and that prosecution on the merits of this application now be initiated. If, however, for any reason the Examiner does not believe such action can be taken, it is respectfully requested that he telephone applicants' attorney at (908) 654-5000 in order to overcome any objections which he may have.

If there are any additional charges in connection with this requested amendment, the Examiner is authorized to charge applicant's Deposit Account No. 12-1095 therefor.

Dated: January 31, 2006

Respectfully submitted,

By 

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